

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Confirmation No.: TBA

Lee, et al.

Examiner: TBA

Serial No. TBA

Docket No. 050324-1322

Filing Date: Herewith

For: **LOW POWER VOLTAGE TO CURRENT CONVERTER**

INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

This information disclosure statement is filed in accordance with 37 C.F.R. §§ 1.56, 1.97, and 1.98. Listed on the accompanying form PTO-1449 are documents which may or may not be considered material to the examination of this application. These documents were made of record in a prior application filed November 21, 2000 and having serial no. 09/718,963, to which priority is claimed relative to the present application pursuant to 35 U.S.C. §120. Copies of these documents are not being provided pursuant to 37 C.F.R. § 1.98(d)(1) and (2), which provides:

(d) A copy of any patent, publication, pending U.S. application or other information, as specified in paragraph (a) of this section, listed in an information disclosure statement is required to be provided, even if the patent, publication, pending U.S. application or other information was previously submitted to, or cited by, the Office in an earlier application, unless:

(1) The application is properly identified in the information disclosure statement and is relied on for an earlier effective filing date under 35 U.S.C. §120; and

(2) The information disclosure statement submitted in the earlier application complies with paragraphs (a) through (c) of this section.

The following rights are reserved by the Applicant(s): the right to establish the patentability of the claimed invention over any of the listed documents should they be applied as reference, the right to prove that some of these documents may not be prior art, and/or the right to prove that some of these documents may not be enabling for the teachings they purport to offer.

This statement should not be construed as a representation that an exhaustive search has been made, or that information more material to the examination of the present application does not exist. The Examiner is specifically requested not to rely solely on the materials submitted herewith. The Examiner is requested to conduct an independent and thorough review of the documents, and to form independent opinions as to their significance.

It is respectfully requested that the Examiner initial and return a copy of the enclosed PTO-1449 to indicate the documents have been considered.

Respectfully submitted,

**THOMAS, KAYDEN, HORSTEMEYER
& RISLEY, L.L.P.**

By:


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Form PTO-1449				Attorney Docket No. 050324-1322		Serial No. TBA	
INFORMATION DISCLOSURE CITATION				Applicant Lee, et al.			
<i>(Use several sheets if necessary)</i>							
Filing Date Herewith				Group TBA			
U.S. PATENT DOCUMENTS							
Examiner Initials	Item	Document Number	Date	Name	Class	Subclass	Filing Date If Appropriate
	1	4,931,749	6/5/99	Walters			10/17/88
	2	5,066,870	11/19/91	Kobatake			6/20/90
	3	5,233,314	8/3/93	McDermott et al.			10/13/92
	4	5,392,205	2/21/95	Zavaleta			11/7/91
	5	5,920,233	7/6/99	Denny			11/18/96
	6	5,491,439	2/13/96	Kelkar et al.			8/31/94
	7	5,629,650	5/13/97	Gersbach et al.			1/29/96
	8	5,646,563	9/30/96	Kuo			7/8/97
	9	5,692,164	11/25/97	Pantelakis			12/18/96
	10	5,703,511	12/30/97	Okamoto			10/23/96
	11	5,740,213	4/14/98	Dreyer			6/3/94
	12	5,767,736	6/16/98	Lakshmikummar et al.			5/27/97
	13	5,870,003	2/9/99	Boerstler			10/3/97
	14	5,886,551	3/23/99	Narahara			3/25/97
	15	5,936,445	8/10/99	Babanezhad et al.			3/21/97
	16	6,011,822	1/4/00	Dreyer			4/17/97
	17	6,028,473	2/22/00	Kamei et al.			3/9/95
	18	6,028,780	2/22/00	Chang			3/12/98
	19	6,058,033	5/2/00	Williams et al.			10/8/98
	20	6,064,251	5/16/00	Park			8/27/97
	21	6,067,336	5/23/00	Peng			10/1/98
	22	6,075,406	6/13/00	Lee et al.			6/16/98
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)							
* EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.				DATE CONSIDERED:			
EXAMINER'S SIGNATURE:							

IP SCHEDULE A
(6/7/92)

ACTIVE US PATENTS/APPLICATIONS & DISCLOSURES

Granted US Patents

Patent No.	Patent Title	Status	Grant Date	Pub. No.	Pub. Date	Pub. Date
1	DOCXT0174W	Granted	776,181	13-Sep-1995	4,737,058	22-Nov-1985
2	DOCXT0185D	Granted	571,596	13-Dec-1995	5,817,003	01-Apr-1997
3	80E131	Granted	354,840	04-Mar-1982	4,544,481	12-Jun-1984
4	82E035	Granted	441,195	12-Nov-1992	4,539,539	03-Sep-1985
5	85E018	Granted	759,193	26-Jul-1989	4,703,205	27-Oct-1987
6	86E008	Granted	849,093	07-Apr-1998	5,006,824	09-Apr-1991
7	89E052	Granted	591,164	01-Oct-1990	5,124,578	23-Jun-1992
8	92E030	Granted	391,555,500	22-Nov-1993	5,455,542	03-Oct-1995
9	93E032	Granted	233,289	26-Apr-1994	5,609,732	25-Feb-1997
10	93E067	Granted	507,202	16-Sep-1994	5,459,782	17-Oct-1995
11	94E005	Granted	198,328	15-Feb-1994	5,523,719	04-Jun-1996
12	94E059	Granted	30,514,509	11-Aug-1995	5,945,204	01-Dec-1998
13	95E002	Granted	515,403	15-Aug-1995	5,781,250	02-Jun-1998
14	95E003	Granted	30,537,376	29-Sep-1995	5,724,837	03-Mar-1998
15	95E058	Granted	544,762	10-May-1996	5,754,801	19-May-1998

IP SCHEDULE A

16	95E071	Extended Time Tracking and Peak Energy In-Window Demodulation for Use in a Direct Sequence Spread Spectrum System	Granted	06/568,053	06-Dec-1995	5,778,022	07-Jul-1998
17	95E072	Variable Digital Automatic Gain Control in a Cordless Direct Sequence Spread Spectrum Telephone	Granted	06/568,161	06-Dec-1995	5,784,669	09-Jul-1998
18	95E080	Method and Apparatus for Signal Quality Estimation in a Direct Sequence Spread Spectrum	Granted	06/348,461	06-Jan-2000	3,301,267	08-Oct-2001
19	95E088	Ultra-Clean Voltage Power Supply Generator	Granted	08/882,444	14-Jul-1997	3,049,724	11-Apr-2000
20	97RSS036	An LC-VCO Charge-Pump and Loop-Filter Architecture for Improved Noise-Immunity in Integrated Phase-Locked Loops	Granted	09/409,509	30-Sep-1999	2,281,758	28-Aug-2001
21	97RSS043	Timing Estimation in Mobile Communication Systems Using Parabolic Interpolator	Granted	09/163,840	30-Sep-1999	2,119,345	17-Apr-2001
22	97RSS080	A Method and an Apparatus for Positioning System Assisted Cellular Radiotelephone Handoff and Dropoff	Granted	09/025,962	19-Feb-1999	3,327,471	04-Dec-2001
23	97RSS081	Cellular Radiotelephone Having Answering Machine/Voice Memo Capability with Parameter-Based Speech Compression and Decompression	Granted	09/026,619	20-Feb-1999	2,240,299	28-May-2001
24	97RSS084	A Transistor Having a Novel Layout and an Emitter Having More Than One Feed Point	Granted	09/126,301	30-Jul-1999	2,236,071	22-May-2001
25	97RSS088	Voltage Upconverter for Portable Time Division Multiple Access Radio	Granted	09/047,242	24-Mar-1999	3,078,187	20-Jun-2000
26	97RSS100	Method and Apparatus for Automatic Gain Control With Improved Response Time and Stability	Granted	09/036,397	06-Mar-1999	3,037,834	14-Mar-2000
27	97RSS105	Universal Radio Architecture for Low-Tier Personal Communication System	Granted	09/346,359	30-Nov-1994	5,644,965	15-Jul-1997

PCSI P036US
Exhibit 2

28	97RSS107	Apparatus for and Method of Improving Efficiency of Transceivers in Radio Products	Granted	08/07/2,311	18-Nov-1997	163,708	19-Dec-2000	
29	97RSS113	Multi-Layer Carrier Module for Power Amplifier Systems within a Digital Cellular Telephone	Granted	08/041,488	30-Sep-1997	5,238,271	22-May-2001	
30	97RSS118	Modulation Technique for Multi-Band Applications	Granted	08/044,281	19-Mar-1998	9,005,443	21-Dec-1998	
31	97RSS118	RF Architecture for Cellular Dual Band Telephones	Granted	08/057,124	08-Apr-1998	208,875	27-Mar-2001	
32	97RSS120	Front End Filter Circuitry for a Dual Band GSM/DCS Cellular Phone	Granted	08/038,358	08-Mar-1998	1,125,271	28-Sep-2000	
33	97RSS122	Battery Management System With Current Measurement Across On-Resistance of Semiconductor Cutoff Switch	Granted	08/940,830	30-Sep-1997	5,031,302	28-Feb-2000	
34	97RSS128	Dualband Power Amplifier Control Using A Single Power Amplifier Controller	Granted	08/065,843	07-Nov-1997	8,216,012	10-Apr-2001	
35	97RSS128	Low Voltage Medium Power Class C Power Amplifier With Precise Gain Control	Granted	08/004,114	21-Apr-1998	5,868,051	12-Oct-1998	
36	97RSS129	Non-Linear Constant Envelope Modulator and Transient Architecture	Granted	08/040,225	13-Mar-1998	8,078,828	20-Jun-2000	
37	97RSS151CON	Programmable Digital Modulator and Methods of Modulating Digital Data	Granted	08/330,577	27-Oct-1994	15,600,878	04-Feb-1997	PCSI P06US Exhibit 2
38	97RSS151	Programmable Digital Modulator and Methods of Modulating Digital Data	Granted	07/653,397	28-Mar-1992	5,420,887	30-May-1995	
39	97RSS154	Sample Interpolator and Method of Generating Additional Samples of a Sampled Waveform Using a Programmable Sample Divider	Granted	818,841	25-Aug-1997	5,837,010	10-Aug-1998	Continuation of Abandoned PCSI Exhibit 2
40	97RSS158	Near Direct Conversion Receiver and Method for Equalizing Amplitude and Phase Therein	Granted	08/521,588	30-Aug-1995	5,823,955	27-Oct-1998	PCSI P06US Exhibit 2

41	97RSS160CON	Frame Structure Using Consecutive Slot Assignments for Mobile Communications	Granted	03/468,374	08-Jun-1995	710,762	20-Jan-1998	PCSI P020US1 Exhibit 2
42	97RSS160	Frame Structure Using Consecutive Slot Assignments for Mobile Communications	Granted	08/145,745	28-Oct-1992	5,444,896	22-Aug-1995	PCSI P020US Exhibit 2
43	97RSS162	Receiver With Filter Offset Correction	Granted	08/518,197	17-Aug-1992	5,757,864	28-May-1996	PCSI P046US Exhibit 2
44	97RSS163	Method and Apparatus for Minimizing Perceptible Impact on an Interrupted Call Prior to Hand-Off	Granted	08/662,552	08-Aug-1990	2,596,916	10-Jul-2001	PCSI P068US Exhibit 2
45	97RSS167	Bipolar Analog Multipliers for Low Voltage Applications	Granted	08/445,088	07-Jun-1992	5,570,056	28-Oct-1996	PCSI P026US Exhibit 2
46	97RSS168	Dual Frequency Synthesizer System	Granted	09/163,735	30-Sep-1992	6,127,900	03-Oct-2000	
47	97RSS179	Retransmission Packet Capture System Within a Wireless Multiservice Communications Environment	Granted	09/922,722	04-Sep-1997	3,145,108	07-Nov-2000	
48	97RSS178	Retransmission Packet Capture System Within a Wireless Multiservice Communications Environment	Granted	09/038,724	10-Mar-1998	6,138,260	24-Oct-2000	
49	97RSS184	Using a Single Low-Noise Amplifier in a Multi-Band Wireless Station	Granted	09/164,188	30-Sep-1998	6,134,427	17-Oct-2000	
50	97RSS200	Digital Phase Lock Loop Divider Cycling Method, Apparatus, and Communication System Incorporating the Same	Granted	10/160,864	25-Sep-1998	6,114,868	05-Sep-2000	
51	97RSS201	Dual Band Transmitter for a Cellular Phone Comprising a PLL	Granted	09/163,766	30-Sep-1998	6,150,880	21-Nov-2000	
52	97RSS202	Transmitter Circuitry for a Cellular Phone	Granted	09/158,878	23-Sep-1998	6,304,748	16-Oct-2001	
53	97RSS209	Stability and Enhanced Gain of Amplifiers Using Inductive Coupling	Granted	09/016,195	30-Jan-1998	6,211,738	03-Apr-2001	
54	97RSS242	Frame Structure Using Consecutive Slot Assignments for Mobile Communications	Granted	145,745	28-Oct-1992	5,444,896	22-Aug-1995	

55	97RSS291	Frequency Reference Compensation	Granted	08/110,811	24-Aug-1993	5,542,095	30-Jul-1994	PCS I P090US Exhibit 2
56	97RSS311	Modulator and Process for Minimizing Power Consumption and Communication System Employing Same	Granted	08/161,154	25-Sep-1993	263,027	17-Jul-2001	
57	97RSS312	Method and Apparatus for Improving Modulation Accuracy	Granted	08/103,418	24-Jun-1993	260,818	31-Jul-2001	
58	97RSS323	Dual Band Cellular Phone With Two Power Amplifiers and Power Control Circuit Therefor	Granted	08/103,897	24-Jun-1993	154,884	28-Nov-2000	
59	97RSS324	Cellular Phone With a Logarithmic Detector	Granted	08/103,899	24-Jun-1993	183,709	19-Dec-2000	
60	97RSS325	Dual Band Cellular Phone With Two Power Amplifiers and a Current Detector for Monitoring the Consumed Power	Granted	08/103,899	24-Jun-1993	151,509	21-Nov-2000	
61	97RSS343	Power Management for a Telephone System by Dynamically Adjusting Transmission Power	Granted	08/104,732	25-Jun-1993	258,478	03-Jul-2001	
62	97RSS347 (WCD)	System and Method for Wireless Voice and Computer Communications	Granted	08/108,987	30-Jun-1993	327,478	04-Dec-2001	
63	97RSS348	Multi-Functional Battery Management Module Operable in a Charging Mode and a Battery Pack Mode	Granted	08/060,425	14-Apr-1993	100,870	08-Aug-2000	
64	97RSS361	Variable Gain Amplifier with Gain Linear with Control Voltage	Granted	08/163,865	30-Sep-1993	124,761	28-Sep-2000	
65	97RSS393	High-Linearity, Low-Spread Variable Capacitance Array	Granted	08/081,542	19-May-1993	181,218	30-Jan-2001	
66	97RSS450	Power Management System for a Mobile Station	Granted	08/050,588	29-Oct-1997	6,044,069	28-Mar-2000	
67	97RSS461	Power Management System for a Mobile Unit by Intelligent Page Monitoring	Granted	08/056,572	07-Apr-1993	240,288	20-May-2001	
68	97RSS469	Cellular Telephone	Granted	088,535	14-Apr-1993	2408,380	20-Apr-1998	

68	97RSS462	Double Balance Differential Active Ring Mixer Mini Current Shared Active RF Input Balun	Granted	09/067,315	29-May-1998	8,057,714	02-May-2000
69	97RSS464	Method and Apparatus for Enhanced Performance in a System Employing Convolutional Decoding	Granted	09/021,888	11-Feb-1998	192,500	20-Feb-2001
70	97RSS474	Amplifier Module With Two Power Amplifiers for Dual Band Cellular Phones	Granted	09/016,242	30-Jan-1998	8,075,985	13-Jun-2000
71	97RSS479	Method and Apparatus for Improving the Sensitivity of an RF Receiver at Certain Frequencies	Granted	09/153,008	11-Sep-1998	192,228	20-Feb-2001
72	97RSS480	Integrated Battery Compartment and Hinge Apparatus and Method for Implementing a Low-Noise Amplifier	Granted	09/073,725	07-May-1998	219,257	17-Apr-2001
73	97RSS485	Receiver for RF Signals	Granted	09/201,643	30-Nov-1998	275,687	14-Aug-2001
74	97RSS497	Method and Apparatus for Shaping Transmits Shaping Filters Among Phase Shifted Signals	Granted	09/203,001	30-Nov-1998	280,228	05-Oct-2001
75	97RSS528	Phase Interpolated Fractional-N Frequency Synthesizer With On-Chip Tuning	Granted	09/194,428	30-Sep-1998	181,674	30-Jan-2001
76	98RSS009	A Compact and Fast Cubic Function Generator	Granted	09/106,847	01-Jul-1998	8,084,272	16-May-2000
77	98RSS014	Flexible Transfer Function Generator	Granted	09/148,568	04-Sep-1998	160,428	12-Dec-2000
78	98RSS015	Intelligent Control of Receiver Linearity Based on Interference	Granted	09/144,404	31-Aug-1998	321,072	20-Nov-2001
79	98RSS058	Method of Independently Creating and Using a Garbage Model for Improved Rejection in a Limited-Training Speaker-Dependent Speech Recognition System	Granted	09/160,813	24-Sep-1998	311,048	30-Oct-2001
80	98RSS134	System and Method for Dynamically Varying Operational Parameters of an Amplifier Cooling System for Power Amplifier and Communication System Employing the Same	Granted	09/134,177	14-Aug-1998	223,155	24-Apr-2001
81	98RSS178		Granted	09/222,688	29-Dec-1998	327,482	04-Dec-2001
82	98RSS202		Granted	09/170,028	13-Oct-1998	134,110	17-Oct-2000

84	98RSS238	Phase/Frequency Detector with Time-Delayed Inputs in a Charge Pump Based Phase Locked Loop and a Method for Enhancing the Phase Locked Loop Gain	Granted	09/343,779	29-Jul-1998	147,561	14-Nov-2000
85	98RSS235	Phase Lock Loop Used as Up Converter and for Reducing Phase Noise of an Output Signal	Granted	09/405,749	30-Sep-1998	255,912	03-Jul-2001
86	98RSS258	Gated delay-locked loop for clock generation applications	Granted	09/302,755	30-Apr-1998	208,183	27-Mar-2001
87	98RSS261	Source-switched or gate-switched charge pump having encoded output	Granted	09/302,668	30-Apr-1998	160,432	12-Dec-2000
88	98RSS267	Fully Integrated Broadband RF Voltage Amplifier with Enhanced Voltage Gain and Method	Granted	09/405,768	27-Sep-1998	265,944	24-Jul-2001
89	98RSS268	Low Noise Low Power Charge Pump System for Phase Lock Loop	Granted	09/405,752	27-Sep-1998	215,383	10-Apr-2001
90	98RSS271	System and Process for Shared Functional Block Communication Transceivers With GPS Capability	Granted	09/258,450	23-Feb-1998	208,844	27-Mar-2001
91	98RSS280	Power Amplifier Driver System for Wireless Handset	Granted	09/328,927	08-Jun-1998	339,381	15-Jan-2002
92	98RSS285	Power Amplification Using A Direct-Upconverting Quadrature Mixer Topology	Granted	09/318,482	25-May-1998	307,894	23-Oct-2001
93	98RSS288	Envelope Peak and Trough Limiting to Improve Amplifier Efficiency and Distortion Characteristics	Granted	09/318,529	25-May-1998	242,975	05-Jun-2001
94	98RSS304	Phase-Locked Loop Having Temperature-Compensated Bandwidth Control	Granted	09/314,898	18-May-1998	211,743	03-Apr-2001
95	98RSS307	Log-Domain Filter Having a Variable Dynamic Range Window	Granted	09/322,401	28-May-1998	262,823	17-Jul-2001

96	39RSS319	Six Inverting Amplifier Transconductance Stage and Methods for its Use	Granted	10/345,225	27-Aug-1999	181,665	20-Feb-2001	
97	39RSS338	Method and Apparatus for Extending a VCO Tuning Range	Granted	10/488,378	03-Feb-2000	204,734	20-Mar-2001	
98	39RSS305	A Method and Apparatus for Improving RF Contact Positioning in an RF Test Socket	Granted	09/390,590	28-Jul-1999	227,878	08-May-2001	
99	39RSS015	Power Amplifier Operated as an Envelope Digital to Analog Converter with Digital Pre-Distortion	Granted	09/410,216	30-Sep-1999	255,009	03-Jul-2001	
100	39RSS025	System and Method For Variable Gain Coax-Decoder	Granted	09/376,325	20-Aug-1999	252,520	29-Jun-2001	
101	39RSS042	Differential Oscillator	Granted	09/388,957	25-Aug-1999	249,190	19-Jun-2001	
102	39RSS068	Peer-To-Peer Data Transfer Using Pre-Existing Caller ID Class FSK Signaling Infrastructure	Granted	09/328,048	05-Jun-1998	304,842	18-Oct-2001	
103	39RSS220	Method and Apparatus for Code Error Correction	Granted	08/131,078	01-Oct-1993	491,700	13-Feb-1996	PCSI P0131/9 Exhibit 2
104	39RSS354	Apparatus and Method for Increasing Data Transmission Rate Over Wireless Communication Systems Using Spectral Shaping	Granted	09/060	28-Jul-1993	368,590	31-Jan-1995	
105	39RSS355	Apparatus and Method For Increasing Data Transmission Rate Over Wireless Communication Systems Using Spectral Shaping	Granted	147,149	03-Nov-1993	507,033	09-Apr-1996	
106	39RSS356	Apparatus and Method for Compensating for Limiter Induced Non-Linear Distortion in a Wireless Data Communication System	Granted	138,085	17-Feb-1994	533,048	02-Jun-1996	
107	39RSS357	Method of Internal Interference Cancellation in TDMA Receiver	Granted	09/495,993	01-Feb-2000	259,752	10-Jul-2001	

108	97RGS372 (PTD)	Compensation Technique Using MOS Capacitance	Granted	09/183,769	30-Sep-1998	087,896	11-Jul-2000
109	97RSS088 (PTD)	CMOS Electrostatic Discharge Protection Circuit With Minimal Loading for High Speed Circuit Applications	Granted	09/183,875	30-Sep-1998	202,046	18-Sep-2001
110	98E117	Effectively Differential, Multiple Input OR/NOR Gate Architecture	Granted	09/752,016	19-Nov-1998	045,646	31-Aug-1999
111	97RSS005	A System and Method for a Monolithic Directional Microphone Array	Granted	08/974,874	20-Nov-1997	192,134	20-Feb-2001
112	97RSS008	Method and Apparatus for Sampling an Audio Signal That is Sensitive to the Audio Signal and Insensitive to Background Noise	Granted	08/920,849	29-Aug-1997	072,882	06-Jun-2000
113	97RSS103	Self-Test and Status Reporting System for Microcontroller-Controlled Devices	Granted	09/247,889	08-Jul-1998	104,304	15-Aug-2000
114	97RSS460	Convolution Decoding Terminated by an Error Detection Block Code with Distributed Parity Bits	Granted	09/021,898	11-Feb-1998	189,190	08-Mar-2001
115	98RGS114	Low-Voltage Dual-Modulus Prescaler Circuit Using Merged Pseudo-Differential Logic	Granted	09/163,862	30-Sep-1998	157,683	05-Dec-2000
116	98RGS288	Interfaced Master Slave ECL Flip Flop	Granted	09/405,924	30-Sep-1998	191,629	20-Feb-2001
117	00CXT0105T	Planar HBT-FET Device	Granted	849,901	23-Sep-1992	250,828	05-Oct-1993
118	93E050	Small Size, High Speed GaAs Data Latch	Granted	727,959	28-Apr-1993	470,688	17-Nov-1993
119	00CXT0101W	Method and Apparatus for Dual Demodulation of Mobile Channel Signals	Granted	484,712	28-Jun-1995	517,530	14-May-1996
120	98E082	Echo Cancelling Method and Apparatus in a Communication Device	Granted	09/588,843	07-Dec-1995	933,494	03-Aug-1999
121	97RSS161	Dual Source for Constant and PTAT Current	Granted	565,424	30-Nov-1995	774,013	30-Jun-1999
122	98E082	Frequency Error Compensation for Direct Sequence Spread Spectrum Systems	Granted	09/588,095	08-Dec-1995	732,111	24-Mar-1998

123	93E063	Frequency Acquisition Method for Direct Sequence Spread Spectrum System	Granted	09/447,538	10-Nov-1998	222,874	24-Apr-2001	
124	93E063	Frequency Acquisition Method for Direct Sequence Spread Spectrum System	Granted	09/558,058	08-Dec-1995	789,034	25-Aug-1998	
125	93E068	Gain Imbalance Compensation for a Quadrature Receiver in a Cordless Direct Sequence Spread	Granted	10/568,210	05-Dec-1995	930,288	27-Jul-1998	
126	93E068	Gain Imbalance Compensation for a Quadrature Receiver in a Cordless Direct Sequence Spread	Granted	10/525,108	03-Jun-1996	307,902	23-Oct-2001	
127	97RSS287DV	Frequency Controller and Method of Correcting Phase Estimates in a PSK Demodulator Using Frequency Control	Granted	09/487,455	07-Jun-1995	594,758	14-Jan-1997	PCSI P008US3 Exhibit 2
128	98RSS178	System and Method for Dynamically Varying Operational Parameters of an Amplifier	Granted	09/222,888	28-12-1998	327,462	04-Dec-2001	
129	97RSS156DV	Timing Recovery Controller and Method for Adjusting the Timing of Synchronizing Windows in a PSK Demodulator	Granted	08/472,125	07-Jun-1995	825,832	28-Apr-1997	PCSI P008US2 Exhibit 2
130	97RSS220	Phase Estimation and Synchronization Using a PSK Demodulator	Granted	07/698,210	31-Dec-1992	378,894	27-Dec-1994	PCSI P008US Exhibit 2
131	98E005 (P.TD)	Pre-Quantization in Motion Compensated Videocoding	Granted	09/008,972	14-Jan-1998	275,527	14-Aug-2001	
132	97RSS010 (P.TD)	Method and Apparatus for Wireless Testing of Integrated Circuits	Granted	08/048,011	23-Mar-1996	331,782	18-Dec-2001	
133	95E074	CID Demodulator for DCT	Granted	09/599,499	07-Dec-1995	828,708	27-Oct-1998	
134	97RSS091	Multiple Antenna Home Base for Digital Cordless Telephones	Granted	09/573,128	15-Dec-1995	881,782	28-Aug-1997	PHS
135	97RSS104	Multiple Antenna Home Base for Digital Cordless Telephones	Granted	09/698,217	19-Aug-1996	844,982	15-Jul-1997	PHS

136	97RSS155	Unique Word Detector and Method for Detecting a Unique Word with one of Several Windows Offset Time	Granted	08/472,121	5,524,127	04-Jun-1996	PHS	
137	97RSS155	Phase detector and a method determining the phase of received PSK symbols	Granted	08/289,081	11-Aug-1994	5,610,949	11-Mar-1997	PHS
138	97RSS157	Method and Apparatus of Frequency Generation for use With Digital Cordless Telephone	Granted	08/013,825	04-Feb-1993	5,722,040	24-Feb-1996	PHS
139	97RSS159	QPSK Coding and Decoding Techniques for Personal Communication Systems	Granted	08/191,809	04-Feb-1994	5,815,222	25-Mar-1997	PHS
140	97RSS165	Multiple Antenna Home Base for Digital Cordless Telephones	Granted	08/573,267	15-Dec-1995	6,996,788	09-Dec-1997	PHS
141	97RSS285	Method and Apparatus for Frequency Synthesization in Digital Cordless Telephones	Granted	08/131,210	01-Oct-1993	5,520,527	11-Jun-1996	PHS
142	97RSS454	Avoiding Interference From a Potentially Interfering Transmitter in a Wireless Communication System	Granted	09/163,072	30-Sep-1998	6,256,477	03-Jul-2001	PHS

DISPUTED WITH BOEING

00CXT0143W	Soft-Decision Classifier	Granted	988,364	09-Dec-1992	BOE	5,361,379	01-Nov-1994
00CXT0095W	Resistive Planar Ring Double-Balanced Mixer	Granted	576,765	04-Sep-1990	BOE	5,125,111	23-Jun-1992
00CXT0096N (PTD)	Large Array MMIC Feedthrough	Granted	540,964	08-Jun-1990	BOE	5,132,848	21-Jul-1992
00CXT0098T	Stress-Free Chemo-Mechanical Polishing Agent for II-VI Compound Semiconductor Single Crystals and Method of Polishing	Granted	787,154	04-Nov-1991	BOE	5,157,878	27-Oct-1992
00CXT0101T	Technique for Doping MOCVD Grown Crystalline Materials Using Free Radical Transport of the Copant Species	Granted	558,940	19-Feb-1991	BOE	5,202,283	13-Apr-1993
00CXT0108T	Technique for Doping Mercury Cadmium Telluride MOCVD Grown Crystalline Materials Using Free Radical Transport of Elemental Indium and Apparatus Therefor	Granted	357,692	19-Feb-1991	BOE	5,308,660	28-Apr-1994
00CXT0113W	Moving Vehicle Classifier with Nonlinear Mapper	Granted			BOE	5,337,257	09-Aug-1994
00CXT0084T	Isolated Low Power Thyristor Gate Drive Circuit	Granted	740,465	03-Jun-1985	BOE	4,631,472	23-Dec-1986
00CXT0113W	Large Time-Bandwidth Chip Pulse Generator	Granted	102,924	08-Aug-1993	BOE	5,428,361	27-Jun-1995
00CXT0140N	Moving Vehicle Classifier With Iterative Deconvolver Estimator	Granted	76,077	11-Jun-1993	BOE	5,387,475	22-Nov-1994

US Pending Patent Applications filed with USPTO

CASE NO.	TITLE	STATUS	INVENTOR	DATE
00CX10018W	VCO Tuning Curve Compensated Charge Pump Current Synthesizer	Pending	09/075,889	29-Sep-2000
00CX10040W	Power amplifier with provisions for varying operating voltage based upon power amplifier output power	Pending	09/782,890	23-Feb-2001
00CX10045W	Multi-Level Power Amplifier	Pending	09/830,248	13-Jun-2001
00CX10070W	IC Capacitor Trimming Using Fuses	Pending	10/121,566	11-Apr-2002
00CX10072W	Longitudinally-Coupled Saw Filter Enhanced Frequency Selectivity	Pending	09/545,232	07-Apr-2000
00CX10283W	System for Closed Loop Power Control Using a Linear or a Non-Linear Power Amplifier	Pending	09/650,987	30-Aug-2000
00CX10308W	Transmitter Architecture having a Secondary Phase-Error Correction Loop including an Amplitude Reconstruction System	Pending	09/850,831	30-Aug-2000
00CX10310W	System for Allowing a TDMA/CDMA Portable Transceiver to Operate with Closed Loop Power Control	Pending	09/665,920	20-Sep-2000
00CX10323W	Multiple Step Switched Translation Loop for Power Amplifier Feedback Control	Pending	09/686,996	21-Sep-2000
00CX10325W	Dual-Feedback Translation Loop	Pending	09/698,577	21-Sep-2000
00CX10350W	Dynamically Biased Power Amplifiers	Pending	09/618,285	27-Mar-2001
00CX10371W	Digitally Controlled Bias Circuit for Amplifiers	Pending	09/617,668	28-Mar-2001
00CX10484W	Amplification Control Scheme for a Receiver	Pending	09/623,488	30-Mar-2001
00CX10517W	Terminal Arrangement for an Electrical Device	Pending	09/677,182	02-Oct-2000
00CX10521W	A Charge Pump Having Reduced Switching Noise	Pending	09/719,953	21-Nov-2000
00CX10523W	Fast Settling Charge Pump	Pending	09/719,615	21-Nov-2000
00CX10528W	Fast-Acquisition Phase-Locked Loop	Pending	09/719,615	21-Nov-2000
00CX10608W	Power Amplifier Circuit for Providing Constant Bias Current Over a Wide Temperature Range	Pending	09/722,172	27-Nov-2000
00CX10618W	Current Mirror Compensation System for Power Amplifiers	Pending	09/772,717	30-Jan-2001

00CXT0041W	Integrated on Chip VCO Calibration Algorithm to Extend VCO Tuning Range	Pending			02-Apr-2002
00CXT0056W	Constant Current Biasing Circuit for Linear Power Amplifiers	Pending	09/083,386		21-Oct-2000
00CXT0059W	Configurable Power Amplifier and Bias Control	Pending	07/071,533		05-Oct-2001
00CXT0062W	Harmonic Cancellation Mixers	Pending	09/023,314		30-Mar-2001
00CXT0076W	Bias Enhancement Circuit for Linear Amplifiers	Pending	09/115,671		15-Nov-2000
00CXT0073W	Continuous Closed-Loop Power Control System Including Modulation Injection in a Wireless Transceiver Power Amplifier	Pending	09/704,930		02-Nov-2000
00CXT00816W	Frequency Plan	Pending	09/023,640		30-Mar-2002
01CXT00011W	Low Voltage Integrated Bandgap Reference for an HBT Linear Power Amplifier	Pending			30-Apr-2002
01CXT00014W	Closed Loop Power Amplifier Control	Pending	00/280,709		30-Mar-2001
01CXT00016W	Exotherm Bias Circuit for Dynamically Compensating for Environmental Variations	Pending	00/051,786		10-Sep-2001
01CXT00019W	Dual Mode PA Having a Common Controller	Pending	10/137,718		30-Apr-2002
01CXT00049W	Systems for Controlling the Frequency of an Oscillator	Pending	09/023,318		30-Mar-2001
01CXT00176W	System for Controlling the Amplitude of an Oscillator	Pending	09/023,285		30-Mar-2001
01CXT00178W	Low Voltage Interface	Pending	09/023,051		30-Mar-2001
01CXT00180W	Interference Reduction for Direct Conversion Receivers	Pending	09/023,313		30-Mar-2001
01CXT00181W	Switched Capacitor for Analog Integrated Circuits	Pending	09/023,679		30-Mar-2001
01CXT00201W	Method & Apparatus Multipath Signal Detection, Identification, and Monitoring for W-CDMA	Pending	00/275,032		12-Mar-2001
01CXT00202W	Method & Apparatus for Spread Spectrum Radio Signal Recovery in Wideband Spread Communication Systems	Pending	00/275,192		12-Mar-2001
				10/096,444	
				10/096,445	

91CXT0235W	A Stable External Emitter Balast for Heterojunction Bipolar Transistors (HBT's) by Modulated Emitter Cap Doping Profile	Pending	10/15,317	03-Apr-2002	
91CXT0341T (P.T.D.)	A Low Current and High Performance BiFET Low Noise Amplifier (LNA)	Pending	10/057,098	23-Jan-2002	
95E060	Method and Apparatus for Signal Quality Estimation in a Direct Sequence Spread Spectrum...	Pending	568,330	06-Dec-1995	
95E062	Echo Cancelling Method and Apparatus in a Communication Device	Pending	09/220,123	23-Dec-1996	
95E068	12 Chip Coded Spread Spectrum Modulation for Direct Conversion Radio Architectures in a Digital Cordless Telephone	Pending			
96E095	Intermediate Frequency Amplifier Circuit for Use in Receive and Transmit Modes	Pending	08/752,797	20-Nov-1998	
97RSS006	Method and Apparatus for Sensing an Audio Signal That is Sensitive to the Audio Signal and Insensitive to Background Noise	Pending	09/481,728	27-Jan-2000	
97RSS057	Multiple Half-Burst Phase Rotation for High Frequency Demodulation	Pending	09/184,534	30-Sep-1998	
97RSS083	Power Amplifier Saturation Prevention Method, Apparatus and Communication System Incorporating the Same	Pending	09/152,438	14-Sep-1996	
97RSS088	Device and Process for Coupling Multi-Band Transmitters and Receivers and Communication System Employing Same	Pending	09/160,677	11-Oct-2000	
97RSS069	Using a Low Frequency Timer to Restore Tuning to a High Frequency Timer	Pending	09/164,432	30-Sep-1996	
97RSS073	A System and Method for Extending the Range of a Base Unit	Pending	09/072,198	31-Jul-2000	
97RSS081	Automatic GSM Mobile Power	Pending	10/029,461	21-Dec-2000	
97RSS101	Apparatus for and Method of Improving Efficiency of Transmitters in Radio Products	Pending	09/161,811	25-Sep-1998	
97RSS107	Transmitters in Radio Products	Pending	09/072,235	27-Sep-2000	

97RSS108	Cellular Telephone Keypad/Acoustic Isolation Device/CD	Pending	09/4/08, 885	28-Sep-1999	
97RSS115	Dual Mode Phone Architecture Utilizing a Single Transmit-Receive Switch	Pending	09/013, 235	26-Jan-1999	
97RSS118CIP (WCD)	RF Architecture for Cellular Dual Band Telephones	Pending	09/248, 257	31-Aug-1998	
97RSS124	Method and System for Efficiently Transmitting Energy from an RF Device	Pending	09/241, 885	27-Jul-1998	
97RSS125	Wide Frequency Range Couplers and Detectors for Power Detection in Multiple Frequency Band Systems	Pending	09/091, 702	20-May-1998	
97RSS127	Integrated Power Management Module	Pending	09/050, 426	14-Apr-1998	
97RSS176	System and Method for Receiving A Signal	Pending	09/409, 484	30-Sep-1998	
97RSS178/1	System and Method for Receiving A Signal	Pending	10/033, 203	28-Dec-2001	
97RSS203	Device, System and Method for Low Noise Radio Frequency Transmission	Pending	09/160, 860	25-Sep-1998	
97RSS205	Device and Process for Coupling Multi-Band Transmitters and Receivers and Communication System Employing Same	Pending	09/100, 840	25-Sep-1998	
97RSS208	System and Process for Shared Frequency Source Multi-Band Transmitters and Receivers	Pending	09/203, 645	01-Dec-1998	
97RSS329	Switchable High-Low Side Mixer for the Transitional IC for Dual Mode Application	Pending	09/295, 038	20-Apr-1999	
97RSS331	First Party Signaling for Call Waiting Calling Number Identification (CWCID) System	Pending	09/623, 447	04-Sep-1997	
97RSS336	Direct Conversion Time Division Duplex, Radio, Direct Sequence Spread Spectrum Cordless Telephone	Pending	09/107, 733	30-Jun-1998	
97RSS338	Techniques to Increase Data Transmission Rate of Spread Spectrum Communications Systems	Pending	09/325, 107	03-Jun-1999	
97RSS347	System and Method for Wireless Voice and Computer Communications	Pending	09/300, 582	27-Apr-1999	
97RSS347	System and Method for Wireless Voice and Computer Communications	Pending	09/974, 769	09-Oct-2001	

97RSS302	Variable Gain Amplifier with High Linearity and Low Noise	Pending	09/163,602	30-Sep-1998	
97RSS371	Method for Programming a Radio Transceiver	Abandoned	09/410,217	30-Sep-1998	
97RSS392	Adaptive Wireless Communication Receiver	Pending	09/163,707	30-Sep-1998	
97RSS449	Traffic Channel Quality Estimation from a Digital Control Channel	Pending	09/046,080	23-Mar-1998	
97RSS450	Power Management System for a Mobile Station	Pending	09/498,911	09-Feb-2000	
97RSS460	Convolution Decoding Terminated by an Error Detection Block Code with Distributed Parity Bits	Published	09/761,299	18-Jan-2001	
97RSS481	Enhanced Keypad Control for Portable Communication Device	Pending	09/073,724	07-May-1998	
ABANDONED					
97RSS483	External Connector and Battery Extension Pack for a Portable Communication Device	Pending	09/137,194	20-Aug-1998	
97RSS494	Power Management System for a Mobile Unit by Reduced Neighbor Cell Scanning	Pending	09/084,534	28-May-1998	
97RSS503	Full-Duplex Speakerphone With Wireless Microphone	Pending	09/144,542	31-Aug-1998	
97RSS518	Turbo Decoding of Traffic-Coded Modulations	Pending	09/410,220	30-Sep-1998	
97RSS5014	A Compact and Fast Cubic Function Generator	Pending	09/709,483	03-Nov-2000	
97RSS5024	Method of and Apparatus for Adaptation of an Echo Canceller in a System With Multitasking	Pending	09/129,362	03-Aug-1998	
97RSS5031	A Method and Apparatus for Dynamically Switching Between Speech Coding Techniques	Pending	09/153,631	15-Sep-1998	
97RSS5064	System and Method for Providing a Trap and Patch Function to Low Power, Cost Conscious, and Space Constrained Applications	Pending	09/232,861	15-Jan-1998	
97RSS5069	System and Method for Communication Parameter Determination	Pending	09/157,200	18-Sep-1998	
97RSS5072	Apparatus and Method for Improving Power Control Loop Linearity	Pending	09/161,014	25-Sep-1998	

98RSS088	Multi-Line Recording Device Having Reduced Processing and Storage Requirements	Pending	00/183,263	28-Sep-1998	
98RSS097	Wireless Communications Device Allowing a Soft Handoff Procedure in a Mobile Communications System	Pending	00/342,105	28-Jun-1998	
98RSS112	Dynamic Range Reduction Circuitry for a Digital Communications Receiver	Pending	00/159,328	23-Sep-1998	
98RSS121	Frequency Hopping Spread Spectrum Modulation and Direct Sequence Spread Spectrum Modulation Cordless Telephone	Pending	00/137,188	20-Aug-1998	
98RSS165	A Method to Generate a Secure Wireless Link Between a Handset and Base-station in a Cordless Phone System Maintaining Vocoder Connection ...	Pending	00/216,360	18-Dec-1998	
98RSS177	Method and Apparatus for Saving Power During Punctured Transmission of Mobile Communications	Pending	00/205,523	03-Dec-1998	
98RSS179	System and Method for Scheduling Amplifiers in a Communications Device	Pending	00/222,043	26-Dec-1998	
98RSS180	System and Method for Selectively Interconnecting Amplifiers in a Communications Device	Pending	00/222,872	25-Dec-1998	
98RSS180	System and Method for Selectively Interconnecting Amplifiers in a Communications Device	Pending		23-Oct-2001	
98RSS189	Secondary Automatic Gain Control Loops for Direct Conversion CDMA Receivers	Pending	00/382,842	25-Aug-1999	
98RSS201	System and Process for Shared Functional Block CDMA and GSM Communication Transceivers	Pending	00/298,315	23-Apr-1999	
98RSS207	Method and System Which Uses Sound Wave Based Communication to Generate A Secure Wireless Link Between A Handset and Base station	Pending	00/218,088	18-Dec-1998	
98RSS237	Programmable relaxation oscillator	Pending	00/202,754	30-Apr-1998	
98RSS276	System and Method for Amplifying a Cellular Radio Signal	Pending	00/400,754	30-Sep-1998	
98RSS280	Power Amplifier Drive System for Wireless Handset	Pending	00/328,927	09-Jun-1999	
98RSS283	Method and Apparatus for Filter Selection From Frequency Synthesizer	Pending	00/392,825	06-Sep-1999	

99RSS321	Mixer Circuit with On-Chip Transmitter	Pending	09/371,311	10-Aug-1999
99RSS321	Dual Tune Input-Integrated VCO on a Chip	Pending	09/708,921	06-Nov-2000
99RSS347	Performance Improvement of Internet Protocols Over Wireless Connections	Pending	09/375,607	17-Aug-1998
99RSS350	Programmable Frequency Divider	Pending	09/370,089	06-Aug-1999
99RSS350	Frequency Divider with Low Harmonics	Pending	09/327,833	30-Mar-2001
99RSS351	Packaging of Surface Acoustic Wave (SAW) Filters on a Multi-Chip Module	Pending	09/455,108	06-Dec-1999
99RSS396	Multi-Band Transceiver Having Multi-Band Capability	Pending	09/387,039	31-Aug-1999
99RSS012	System and Method for Cordless Telephonic Communication	Pending	09/756,039	05-Jan-2001
99RSS025	System and Method For Variable Gain Coder-Decoder	Pending	09/845,840	30-Apr-2001
99RSS030	Multi-Band Filter System For Wireless Communication Receiver	Pending	09/330,846	11-Jun-1998
99RSS032	Differential Oscillator	Pending	09/875,239	29-Sep-2000
99RSS037	System and Method for Receiving Analog and Digital Signals	Pending	09/383,122	23-Aug-1999
99RSS057	A Method to Combine the Detection of Sutter Dial Tone and VMI/FSK Signals Integrated Within a Telephone	Pending	09/299,202	23-Apr-1999
99RSS065	Direct Conversion Receiver	Pending	09/200,919	02-Mar-1999
99RSS065	Direct Conversion Receiver	Pending	09/286,863	31-Aug-1999
99RSS069	Peer-to-Peer Data Transfer Using Pre-existing Caller ID	Pending	09/363,969	16-Jul-1999
99RSS077	Class FSK Signaling Infrastructure	Pending	09/407,149	28-Sep-1999
99RSS078	Local Area Internet Radio Receiver/Transmitter	Pending	09/614,199	21-Mar-2001
99RSS078	System for Controlling a Class D Amplifier	Pending	09/410,139	30-Sep-1999
99RSS082	System and Process for Supporting Multiple Wireless Standards With a Single Circuit Architecture	Pending	09/681,932	15-Jun-2001
99RSS083	System for Using Adaptive Circuitry To Improve Performance and Provide Linearity and Dynamic Range on Demand	Pending		

99RSS065	Avoiding Interference from a Potentially Interfering Transmitter in a Wireless Communication	Pending	09/394,189	13-Sep-1998	
99RSS065	Wireless Communications System Utilizing Directional Wireless Communication Device	Pending	09/621,110	29-Mar-2001	
99RSS066	Cellular Handset with Adjustable Analog to Digital Conversion	Pending	09/410,205	30-Sep-1998	
99RSS068	processor and related frequency translator	Pending	09/281,050	02-Mar-1998	
99RSS068	processor and related frequency translator	Pending	09/388,959	27-Aug-1998	
99RSS102	Direct Sequence Spread Spectrum System with Enhanced Forward Error Correction Code Feature	Pending	09/427,041	19-Oct-1998	
99RSS116	System and Method for Achieving Wireless Communications Coverage in a Local Area	Pending	09/400,297	28-Sep-1998	
99RSS130	Hands-Free Activation of a Personal Communication Device	Pending	09/388,909	15-Sep-1998	
99RSS136	Simple Dual Band Multi Time Slot Receiver Architecture	Pending	09/392,355	08-Sep-1998	
99RSS138	System of and Method for Compensating a Baseband Signal to Reduce Third Order Modulation Distortion	Pending	09/515,538	28-Feb-2000	
99RSS161	A Novel Technique for Generation of Phase/Frequency Modulated Signals	Pending	09/388,911	14-Sep-1998	
99RSS172	A Balun Circuit for Combining Differential Power Amplifier Outputs	Pending	09/386,883	31-Aug-1998	
99RSS174	A GNC Filter and Method for Suppressing Unwanted Signals Introduced by the Filter	Pending	09/683,843	18-Sep-2000	
99RSS196	Method and Apparatus for Multiple Phase Splitting for Dual Band IQ Subharmonic Mixer	Pending	09/506,302	17-Feb-2000	
99RSS213	Dynamically Varying Linearity System for an RF Front-End of a Communication Device	Pending	09/811,082	16-Mar-2001	
99RSS232	Smart Current System for Dynamically Varying the Operating current of a Frequency Source in a Receiver	Pending	09/793,744	26-Feb-2001	
99RSS287	System of and Method for Reducing or Eliminating the Unwanted Sideband in the Output of a Transmitter Comprising a Quadrature Modulator Followed by a	Pending	09/514,501	28-Feb-2000	

	Transitional Loop				
99RSS301	DMA Channel for High Speed Asynchronous Data Transfer	Pending	00650,852	17-Apr-2000	
99RSS305	Coherent Power Amplifier With Integrated Quarter Wave Transformer/Combiner Circuit	Pending	00701,100	16-Jan-2001	
99RSS310	System of and Method for Reducing or Eliminating the Unwanted Sideband in a Signal Derived from the Output of a Quadrature Modulator	Pending	00615,633	28-Feb-2000	
99RSS313	System for Associating User Selectable Information in Wireless Devices	Pending	00642,601	28-Apr-2001	
99RSS316	Power Amplifier Saturation Detection and Compensation	Pending	00631,801	30-Aug-2000	
99RSS336	Low-Power Method of Interference Cancellation in GSM Receiver	Pending	00634,081	08-Aug-2000	
99RSS359	Signal Detector With Echo Cancellation	Pending	00702,816	23-Feb-2001	
99RSS368	High Efficiency Multiple Power Level Amplifier	Pending	00606,440	10-Oct-2000	
99RSS397	Non-Linear Translator Circuits with Thermal Stability	Pending	00671,517	31-May-2001	
99RSS404	System for Using a Local Wireless Network to Control a Device Within Range of the Network	Pending	00658,729	11-Sep-2000	
99RSS405	System For Eight Phase 45 Degree Polyphase Filter With Amplitude Matching	Pending	00668,501	18-Sep-2000	
99RSS408	Polyphase Tuning for Phase Calibration	Pending	00623,289	30-Mar-2001	
99RSS410	Stacked Core Half-LO Mixer	Pending	00668,879	25-Sep-2000	
99RSS422	Temperature Compensation Module	Pending	00712,771	13-Nov-2000	
99RSS426	Trap and Patch System for Virtual Replacement of Defective Volatile Memory Cells	Pending	00671,401	27-Sep-2000	
99RSS428	Zero-Overhead Symbol Rate Adaptation System for OVSF Code	Pending	00718,985	22-Nov-2000	
99RSS461	Programmable Client Ringing System for Communication Systems	Pending	00650,543	30-Aug-2000	
99RSS468	System and Apparatus for a Direct Conversion Receiver and Transmitter	Pending	00621,407	21-Jul-2000	

99RSS479	Even Order Non-Linearity Correction Feedback for Gilbert Style Mixers	Pending	99/811,133	16-Mar-2001	
99RSS497	Adaptive Configurable Demodulation System With Multiple Operating Modes	Pending	99/710,764	08-Nov-2000	
99RSS498	Digital Phase-Frequency Detector	Pending	99/799,822	05-Mar-2001	
99RSS500	Burst Detector	Pending	99/735,366	12-Dec-2000	
99RSS504	Variable-Slope Variable-Gain Amplifier	Pending	99/699,669	11-Oct-2000	
97RSS910 (PTD)	Methods for Wireless Testing of Integrated Circuits	Pending	99/764,689	16-Jan-2001	
99RSS268 (PTD)	Electrostatic Discharge Protection Circuit	Pending	99/738,127	15-Dec-2000	
99CXT02901 (PTD)	Improved Transformer Compensating Stacked Inductors	Pending	99/797,307	01-Mar-2001	
99CXT03357 (PTD)	On-Chip Transformers	Pending	99/779,402	08-Feb-2001	
99CXT0822M	Systems for Testing Integrated Circuits	Pending	99/822,820	30-Mar-2001	
97RSS084 CON	A Transistor Having a Novel Layout and an Emitter Having More Than One Feed Point	Pending	99/657,381	13-Oct-2000	
97RSS084 Cip	Transistor Layout	Pending	99/681,821	21-May-2001	
97RSS313	Method and Apparatus for Detecting and Correcting Errors Using Cyclic Redundancy Check	Pending	99/703,421	24-Jun-1998	
97RSS465	Envelope Feedforward Technique with Power Control for Efficient Linear RF Power Amplification	Pending	99/106,828	01-Jul-1998	
99RSS275	RF Transmitter with Extended Efficient Power Control Range	Pending	99/482,121	11-Jeh-2000	
99RSS013	RF Transmitter with Extended Efficient Power Control Range	Pending	99/481,094	11-Jun-2000	

99RSS133	Apparatus and Method for Connecting a Cellular Telephone to a Universal Serial Bus	Pending	09/312,064	13-May-1999
99RSS339 (PTD)	Electrical Contact for Compound Semiconductor Device and Method for Forming Same	Pending	09/675,025	28-Sep-2000
99RSS365 (PTD)	Electrical Contact for Compound Semiconductor Device & Method for Forming Same	Pending	09/360,323	28-May-2000
00CXT02887 (PTD)	Modified HBT Collector Design for Increased Robustness	Pending	10/034,880	28-Dec-2001
99RSS143 (PTD)	Electrostatic Discharge Protection Circuit	Pending	09/519,214	3-Mar-2001
99RSS081 (PTD)	Critical Path Adaptive Power Control	Pending	09/814,921	22-Mar-2001
97RSS475	Polarization-Adaptive Antenna Transmit Diversity System	Pending	09/103,417	24-Jun-1998
97RSS477	Using Channel Loading Statistics to Determine Whether to Search for a New Channel in a Wireless Communication System	Pending	09/201,078	30-Nov-1998
99RSS173	Mixing Method for ADPCM Coded Speech Signal Without Performance Critical Threshold Comparisons	Pending	09/234,243	20-Jan-1999
99RSS284	Efficient Accurate Controller for Envelope Feedforward Power Amplifiers	Pending	09/409,618	30-Sep-1999
99RSS133	Apparatus and Method for Connecting a Cellular Telephone to a Universal Serial Bus	Pending	09/312,064	13-May-1999
99RSS282	Device-Independent Interface for Embedded Telephone Applications to a Wireless Spread-Spectrum Link and Audio Processor	Pending	09/478,127	07-Jan-2000
00CXT04300W (PTD)	System and Method for Processing Audio and Video Data in a Wireless Handset	Pending	09/831,511	03-Aug-2000
00CXT04310W (PTD)	System and Method for Processing Audio and Video Data in a Wireless Handset	Pending	09/831,508	03-Aug-2000
00E005/1	Pre-Quantization in Motion Compensated Video Coding	Pending	09/828,535	05-Apr-2001

Innovation Disclosures

Innovation Disclosures Assigned to Outside Counsel in Progress

Innovation ID	Description	Assigned To	Status	Effective Date
00CXT0070W	IC Capacitor Trimming Using Fuses	WCD	Assigned	
00CXT0284W	Integrated Auto-Calibration of On Chip VCOs by Winner Selection Algorithm, and Sensitivity Adjustment by Coarse and Fine Varactor Tuning	WCD	Assigned-FBD	
00CXT0522W	Differential Phase-Locked-Loop Method of Non-Constant Envelope Modulation	WCD	Assigned	10/30/2007
00CXT0816W	Adaptive Matching System	WCD	Assigned	
00CXT0917W	Desensitizing Bias Circuit to Prevent RF Interaction	WCD	Assigned	
00CXT0920W	Method for Determining Quality of Dielectric Laminated Substrate	WCD	Assigned	
00CXT0941W	Integrated on Chip VCO Calibration Algorithm to Extend VCO Tuning Range	WCD	Assigned	
01CXT0007W	Using Trimming Hooks to Integrate a Circuit that can Calibrate the VCO Independently Each Time at Circuit Power-up	WCD	Assigned	
01CXT0002W	Monitor the Varactor Capacitance of the Process Time Process Control Monitor	WCD	Assigned	
01CXT0164W	Supply & Bias Enhancements for CMOS Power Amplifiers, Second Generation PMIC/PA	WCD	Assigned-FBD	10/16/2007
97RSS308	An Current Compensation Method in Replica Circuit Where the Product of the Transconductance and Resistance is Kept Constant	WCD	Assigned	
99RSS9079	Method for Implementing a Radio Transceiver with Digital Signal Processing	WCD	Assigned	
99RSS128	Capacitor Calibration for Current-Tuned Filters	WCD	Assigned	
99RSS200	A Multiple Cascaded DS Offset Correction Scheme is Proposed For Use in Correcting Offsets Caused by Multiple Cascaded High Gain Baseband Stages in Transceivers	WCD	Assigned	
99RSS246	Switchable Gain Low Noise Amplifier for DCMA/AMPS Applications	WCD	Assigned	
99RSS409	Gain Calibration for Linearity On-Demand Systems	WCD	Assigned	
00CXT0254W	Power Amp Control Driver Providing Over-Current Protection and	WCD	Assigned-FBD	

Control Linearization				
00CXT0524W	Feedback-and-Feedforward Closed-Loop Power Control for Amplitude-Modulated Signals	WCD	Assigned-FBD	
02CXT0004W	Software Defined Transmitter for WCDMA, GSM EDGE, TDMA	WCD	Assigned	
01CXT0288W	GSM/GPRS Transmitter with Synchronous Oscillator Feed	WCD	Assigned	
01CXT0294W	CMOS/BICMOS Subharmonic Mixer for Improved Noise, Power Consumption and Headroom	WCD	Assigned	
01CXT0355W	Use of NiV as Seed Layer for Electroplated Backside Metallization of III-V Semiconductor Circuits	WCD	Assigned	

Innovation Disclosures on Hold Status

00CXT0052W	High Performance Dual Tone Detections in Presence of Speech Interference	WCD	Hold/Assigned		
00CXT0054W	Series U-Ion Battery Charger	WCD	Hold-FBD/Assigned		
00CXT0282W	Power Amplifier Saturation Control Scheme	WCD	Hold-FBD/Assigned		
00CXT0463W	A GFSK/GMSK Detector with Enhanced Reception Performance in Co-channel Interference and A WGN Channels	WCD	Hold-FBD/Assigned		
00CXT0471W	Voltage Regulator Based on Switchable Capacitor Array or Simply Digital LDO*	WCD	Hold-FBD/Assigned		
00CXT0535W	Variable RF Gain Power Amplifier Driver	WCD	Hold-FBD/Assigned		
00CXT0538W	Programmable Dual Power Amplifier Drivers for CDMA Applications	WCD	Hold-FBD/Assigned		
00CXT0885W	A FEI/r/RT Bias Circuit for Low Voltage Wireless Handsets	WCD	Hold-FBD		
00CXT0898W	High Efficiency Adjustable Power Amplifier	WCD	Hold-FBD		
00CXT0787W	DC Offset Correction Technique for a Direct Conversion Bluetooth Receiver	WCD	Hold-FBD		
00CXT0773W	A Design Technique for the Thermal Stabilization of Wireless Power Amplifiers	WCD	Hold-FBD		
00CXT0708W	Phase Detector Based Upon Look-Up Table	WCD	Hold-FBD		
00CXT0708W	Fast Response Low IF Filter Using Differential Peak Detectors	WCD	Hold-FBD		
00CXT0805W	Acquisition Speed Up for Fractional-N Synthesizers	WCD	Hold-FBD		
00CXT0807W	Resistor Calibration Algorithm	WCD	Hold-FBD		
01CXT0815W	Calibration of Device Using a Linear PA	WCD	Hold/Assigned		
01CXT0017W	Optimum Distortion Topology for Broad Bandwidth	WCD	Hold/Assigned		
01CXT0083W	New Self Oscillating AM Modulator	WCD	Hold/Assigned		
01CXT0100W	Linearized Spill-Relaxing Technique for Power Amplifiers	WCD	Hold-FBD		
01CXT0123W	Dynamically Tuned Embedded Antenna	WCD	Hold-FBD		
01CXT0156W	An Algorithm for Removing Unwanted DC Offset from the Desired Signal at the GSM Receiver	WCD	Hold-FBD		
01CXT0167W	Detection of Strong Unwanted Interfering Signals in Direct	WCD	Hold-FBD		

01CXT0033W	Highly Accurate 45 Signal Generation with Application to Sub-Harmonic Mixers	WCD	Hold-FBD		
02CXT0003W	Switchable VCO Performance in a Time-Division Duplex Communication Device	WCD	Hold-FBD		
02CXT0005W	Varying VCO Performance as Receiver Signal Level Changes	WCD	Hold-FBD		
04RSS387	System for Manufacturing a Stacked Plate Capacitor Having an Interconnect Metal Plate	WCD	Hold-FBD/Assigned		
04RSS423	Improvements to Linearization and High Efficiency in Power Amplifiers	WCD	Hold-FBD/Assigned		
04RSS424	Linearization Improvement in PAs using Split Stage Bias	WCD	Hold-FBD/Assigned		
04RSS488	Blue Tooth I/O Saving Front End Architecture and Device	WCD	Hold-FBD/Assigned		
01CXT0029W	Improving Water Yield During Water Scribe and Break by Adding a Protective Film at Die Corners	WCD	Hold-FBD		

Innovation Disclosures/CLOSED Status

59RIS494	Bandgap Regulator Using Capacitive Charge Pumping	WCD	CLOSED
00CXT0231W	Symmetrically-Driven Oscillator with Vertical Structure	WCD	CLOSED
00CXT0923W	Power Amplifier Having Tunable Bias Points	WCD	CLOSED
00CXT0943W	Noise Coupling Reduction Scheme in Dual Fractional-N Integer-N Frequency Synthesizer	WCD	CLOSED
00CXT0945W	Quantization Noise Reduction Delta-Sigma Fractional-N Frequency Synthesizer with Digital Frequency Doubler	WCD	CLOSED
00CXT0936W	Improved Modulus Control Method in Frequency Synthesizers with an Embedded D Flip-Flop	WCD	CLOSED
00CXT0789W	Feedforward LNA/Mixer Switched Gain Block Architecture	WCD	CLOSED
00CXT0909W	High Q Digital Vitractor	WCD	CLOSED
01CXT0039W	A CMOS RF Programmable Driver for Bluetooth Applications	WCD	CLOSED
01CXT0154W	Dynamic Calibration of a Block in a GSM Power Amplifier Control (PAC) Loop with Application to a Block that Converts the Linear Scale to Log Scale	WCD	CLOSED
01CXT0299W	Active Temperature Compensated RF Power Detector	WCD	CLOSED
01CXT0309W	New Phase Detection and Lock Circuit for Clock/Freq Synthesis	WCD	CLOSED
01CXT0310W	A PLL and Clock Independent VCO Tuning Calibration Algorithm	WCD	CLOSED
01CXT0342W	An Algorithm for Automated Receiver Static Sensitivity Measurement	WCD	CLOSED

Innovation Disclosures not yet ranked

Cash Number	Inventor	Disclosure Status
98E042		
Current Limiting Low Impedance Active Bias Circuit for Power Amplifiers		
No Rank		
P. Lau		
01CXT0258W (PTD)		
Optimized Layout for Power Amplifier Arrays to Reduce Peak Junction Temperature		
No Rank		
01CXT0354W (PTD)		
MCM Construction Using Capped Buried Vias for Heat Transfer and Lower Inductance		
No Rank		
02CXT0007W (PTD)		
A New BIFET Gilbert-cell Mixer		
No Rank		
02CXT0011W		
Audio-Video Synchronization to Support Streaming in UMTS Multimedia Messaging Service (MMS)		
No Rank		
02CXT0020W		
Integration of an Implanted Lateral PNP with a Double Hetero-Junction NPN in an Existing InGaP/GaAs HBT Process Technology		
No Rank		
02CXT0022W		
Method for Forming a Compact R-C-R By-pass Network for Device Ballasting		
No Rank		

02CXT0025W
Programmable 8/0 and 8/17 High Frequency Prescaler with a Optimized Supply Current
No Rank

02CXT0025W
A Layout Technique Reducing Bipolar Transistor External Base Resistance
No Rank

02CXT0030T
Design of a Lateral Metal Insulator Metal Capacitor in a Semiconductor Metal Process to Meet Density and Slotting Rules
No Rank

02CXT0040W
Optimized Double Heterostructure Bipolar Transistor Design
No Rank

02CXT0041W
A Technique to Efficiently Allocate Computational Resources in a Digital Communication System
No Rank

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SYSTEM SMART	Japan	Pending	WCD